Erosive Tarlov's Cyst in the Thoracic Spine: Surgical Indications and Literature Review

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Introduction

Most commonly found in the sacrum with minimal indication for surgery, Tarlov’s perineurial cysts can rarely present throughout the spinal axis and are commonly mistaken for nerve root sheath tumors. We present a case report of multiple, pan spinal cysts diagnosed via radiating pain symptoms and MRI scanning associated with bone erosion and remodeling, most prominent in the thoracic spine. After CT-Myelography reconfirmed the extent of the multi-level Tarlov’s cysts, the erosive nature and referable pain driver being at T6-7, surgery was opted for the patient. Surgical extirpation followed a long course of conservative measures and the escalating intolerance of symptomology.

Methods

* The actual diagnosis of multiple cysts predated the surgical recommendations by two years, as this patient strove to obviate surgical intervention. Through the course of her therapies and vigilance, the symptoms became consumptive and surgical excision was mutually agreed upon. The cyst had expanded and eroded the costo-vertebral junction at the T6-7 level, and entered the lung field with both pleural/lung displacement.

Imaging

(Above) CT Myelogram, axial view showing cyst and bony erosion. (Below) Sagittal, CT Myelogram demonstrating cyst size and bony involvement

Results

* The patient underwent a combined neurosurgical/cardio-thoracic approach with a modified far-lateral, costotransversectomy, with pre-positioning for a thoracotomy if necessary. Fortunately, the CSF filled cyst collapsed upon exposure, allowing the cyst wall to be peeled off the pleura and surrounding tissues without complication. The cyst was removed at level of nerve exit zone, with suture ligation and vascular clamps applied. The radiating pain syndrome was ameliorated immediate post-operatively and has maintained its relief at three months.

Conclusions

* Surgical approaches are efficacious and curative for large erosive cysts in the thoracic spine when preoperative symptoms fail to aqueous to conservative measures or pathologically breach vital organ structures. The combined approach in this case of cardiac surgery and neurosurgery allowed complete extirpation of the lesion and adequate strategies to be framed if necessary.

References

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